



Development and Maintenance of the GSFC Software Process Improvement (SPI) Website

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Approved By: (signature)

Name: Sally Godfrey

Title: Chair, GSFC EPG

Responsible Office: GSFC Engineering Process Group (EPG) **Asset Type:** Procedure

Title: Development and Maintenance of the GSFC SPI Website **PAL Number:** 3.5.4.3

Purpose This procedure describes the steps to be taken when a modification or enhancement of the GSFC Software Process Improvement (SPI) Website is needed.

Scope This procedure is applicable solely to the GSFC SPI Website.

**Roles and
Responsibilities**

EPG Chair:

- Leads the GSFC Engineering Process Group (EPG)

EPG Member:

- A civil servant or contractor who is a member of the GSFC EPG; includes SPI Project staff

Web Team Chair

- The staff member who leads the Web Team. The Web Team is a sub-team of the GSFC SPI Project that supports the development and maintenance of the SPI Website

Web Team Member

- An SPI Project staff member who participates in the design, implementation, and maintenance of the SPI Website. Members attend Web Team meetings, complete action items, provide expertise, and contribute to the resolution of issues.

Web Team Secretary

- The Web Team member who is responsible for recording meeting minutes and action items, and for maintaining the Team's Action Item Log and Archive

Website Database Administrator (DBA):

- Creates and maintains the structure and content of the SPI Website database

Webmaster:

- Implements the design of the SPI Website
- Posts Website files on the development server and requests promotion of these files to the operational server

Website Quality Assurance Officer (QAO):

- Verifies any changes made to the implementation and/or content of the operational SPI Website
- Assists the Webmaster and DBA in correcting implementation defects

**Step-Action
Table**

GUIDANCE: The following steps are usually performed sequentially, although Steps 5 through 13 may be repeated (in sequence) as necessary to achieve successful implementation.

Step	Action	Role
1	<p>When a change request (a request or recommendation for a modification or enhancement to the website) is received, forward it to the Web Team Chair or enter it into the Web Team Problem Report or Web Team Issues database (both of which are on the Software Process Improvement Group (SPIG) workspace).</p> <p><i>GUIDANCE: Any EPG member may receive or originate a Website change request. Users of the SPI Website may originate change requests via the Website Feedback Form.</i></p>	EPG Member
2	Put the change request on the agenda for discussion at an upcoming Web Team meeting.	Web Team Chair (or designee)
3	<p>At the meeting, determine what, if any, additions and revisions need to be made to the Software Process Improvement (SPI) website in response to the change request or recommendation.</p> <p><i>GUIDANCE: If major changes to the Website are required, use brainstorming techniques to identify each item that should appear on the new/revised pages. Then decide how and where to position each item on the pages, e.g., within headings, text, tables, graphics, or menus.</i></p>	Web Team Members and Chair
4	Record these determinations in the minutes and, if appropriate, as action items in the "Web Team Action Item Log" and post the log on the SPIG workspace.	Web Team Secretary

Check the Process Asset Library at <http://software.gsfc.nasa.gov/process.cfm> to obtain the latest version.

NOTE: Words or phrases shown in blue underlined contain links to additional information.

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5	If action item(s) require development of new Website pages, design and write the necessary material. <i>GUIDANCE: Website material is usually developed in MS Word or PowerPoint, then converted to html.</i>	Web Team Member(s) assigned to action item(s)
6	Forward the new material to the Website QAO and Webmaster. Notify the Web Team Secretary when action item(s) are completed.	Web Team Member(s) assigned to action item(s)
7	Make any necessary updates to the table structure, data, and SQL queries within the development copy of the SPI Website database, as directed in action item(s).	Website DBA
8	Post the updated development copy of the database on the SPIG and notify the Webmaster of its availability. <i>GUIDANCE: In this procedure, the SPIG is used as a temporary repository to facilitate transfer of large database files.</i>	Website DBA
8	Forward the new/revised SQL, implementation instructions, and supplementary information to the SPI Webmaster.	Website DBA
9	Notify the Web Team Secretary, Website QAO, and Webmaster that the DBA action item(s) that address this request/recommendation have been completed.	Website DBA
10	Per the action item(s) for this change request, install the development copy of the database on the development Web server and insert any SQL into the source code for the Website. <i>GUIDANCE: There are two ISD Web servers currently in use: a development server and an operational server.</i>	Webmaster
11	Add any new material from Step 6 and implement any necessary changes to existing Website pages.	Webmaster
12	Test the changes that have been made on the development Web server.	Webmaster

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13	Send out a promotion request to have the database and website files promoted from the development web server to the operational server.	Webmaster
14	When the promotion request has been executed, notify the Website QAO, and Web Team Secretary that the action item(s) has been completed.	Webmaster
15	Verify that the website operates as specified. If defects are found, follow up with the DBA and Webmaster until these are resolved satisfactorily.	Website QAO
16	Notify the Web Team Secretary (with copies to the Webmaster and Website DBA) that the action item(s) may be closed.	Website QAO
17	Update the Action Item Log to close the action items that have been verified as complete.	Web Team Secretary
18	Send the originator of the change request an e-mail either notifying them that their request has been implemented or explaining why it was rejected.	Web Team Secretary

Measures

Recommended Measures:

GUIDANCE: These measures are recommended for collection by the SPI Project on a monthly basis.

- Number of database versions posted to the operational server
- Number of new, open, and completed Web Team action items
- Number of Website change requests completed

Required Measures:

None

Training

Course Title	Description
GSFC Software Development Process Website Overview	This Software Engineering Discussion provides a quick, high-level overview of the GSFC Software Process Improvement website, followed by a demonstration of the website's capabilities.

GUIDANCE: Training availability can be checked at <http://software.gsfc.nasa.gov/training.htm>.

References

- **Glossary:** <http://software.gsfc.nasa.gov/glossary.cfm>
Defines common terms used in ISD procedures
- **SPI Website:** <http://software.gsfc.nasa.gov>
- **Process Asset Library:** <http://software.gsfc.nasa.gov/process.cfm>
Library of all ISD process and procedure descriptions

Change History

Version	Date	Description of Improvements
1.0	12/19/05	Approved by the GSFC EPG
1.1	7/8/06	PAL number changed to 3.5.4.3

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